



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 2  
290 BROADWAY  
NEW YORK, NY 10007-1866

February 13, 2003

Ms. Nancy Kempel  
New Jersey Department of Environmental Protection  
DWQ/PSPR  
401 East State Street, 2<sup>nd</sup> Floor  
P.O. Box 029  
Trenton NJ 08625

Project: Montgomery Township Housing Development (MTHD) and  
Rocky Hill Municipal Well (RHMW) Superfund Sites

Re: New Jersey Pollution Discharge Elimination System/Discharge  
to Surface Water (NJPDDES/DSW) Permit Equivalency Application

Dear Ms. Kempel:

Attached please find the New Jersey Pollution Discharge  
Elimination System/Discharge to Surface Water (NJPDDES/DSW) Permit  
Equivalency Application for the Montgomery Township Housing  
Development (MTHD) and Rocky Hill Municipal Well (RHMW) Superfund  
Sites for surface water discharge. CDM submitted the draft  
NJPDDES/DSW permit equivalency application to the New Jersey  
Department of Environmental Protection on November 13, 2002 for  
your review.

If you have any questions, please contact me at (212) 637-3942 or  
Ali Rahmani of CDM at (732) 225-7000.

Sincerely yours,

Monica J. Mahar, Project Manager  
New Jersey Remediation Branch

cc: Kamala Morgan, USACE  
Demetrios Klerides, CDM  
Ali Rahmani, CDM

300132



Internet Address (URL) • <http://www.epa.gov>

Recycled/Recyclable • Printed with Vegetable Oil Based Inks on Recycled Paper (Minimum 50% Postconsumer content)



DEPARTMENT OF THE ARMY  
KANSAS CITY DISTRICT, CORPS OF ENGINEERS  
700 FEDERAL BUILDING  
KANSAS CITY, MISSOURI 64106-2896

REPLY TO  
ATTENTION OF

DATE: 6 Feb 03

FROM: CENWK-EC-EB

SUBJECT: Rocky Hill Municipal Wellfield and Montgomery Township Housing Development

TO: CENWK-EC-ED

ATTN: Monica Mahar

Transmittal Of:

<input type="checkbox"/> CONCEPT DESIGN	<input type="checkbox"/> COMMENTS
<input type="checkbox"/> PRELIMINARY DESIGN	<input type="checkbox"/> TOPO SURVEY
<input type="checkbox"/> FINAL DESIGN	<input type="checkbox"/> STUDY
<input checked="" type="checkbox"/> OTHER: NJDES Application	
FOR: <input type="checkbox"/> REVIEW AND FURNISH COMMENTS BY:	
<input type="checkbox"/> REVIEW & FURNISH RESPONSE TO COMMENTS BY <input type="checkbox"/>	
<input type="checkbox"/> RETENTION	
<input type="checkbox"/> OFFICIAL LTR TO FOLLOW CONFIRMING THIS TRANSMITTAL	
<input type="checkbox"/> ACTION	<input type="checkbox"/> NOTE&RETURN
<input type="checkbox"/> INFORMATION	<input type="checkbox"/> COORDINATION
<input type="checkbox"/> PER CONVERSATION	<input type="checkbox"/> CIRCULATE

REMARKS: Monica,

Attached for your signature is the NJPDES application. Please return the forms to CDM after you have signed.

Kamala D. Morgan

State of New Jersey  
Department of Environmental Protection

REFERRAL FORM

Date 3-18-03

TO

FROM

MONICA MAHAR  
USEPA

LARRY QUINN, NJDEP

TELEPHONE EXT. 609-633-0766

RE: MRH PERMIT EQUIVALENT

For Your	<input type="checkbox"/> ACTION	<input type="checkbox"/> APPROVAL	<input type="checkbox"/> INFORMATION	<input checked="" type="checkbox"/> REVIEW
	<input checked="" type="checkbox"/> COMMENTS	<input type="checkbox"/> SIGNATURE	<input type="checkbox"/> FILE	<input type="checkbox"/> _____

Monica,

Attached are 2 copies of the NJPDES permit equivalent for the Montgomery/Rocky Hill (MRH) surface water discharge.

I think we can get some charges made if we provide comments, so let me know if you have any.

Larry Quinn



**State of New Jersey**

James E. McGreevey  
Governor

Department of Environmental Protection  
Division of Remediation Management & Response  
Bureau of Case Management  
P.O. Box 413  
Trenton, New Jersey 08625-0413

Bradley M. Campbell  
Commissioner

Monica Mahar, Project Manager  
Southern New Jersey Remediation Section  
U. S. Environmental Protection Agency  
Region 2  
290 Broadway  
New York, New York 10007-1866

**MAR 13 2003**

RE: 95% Remedial Design Submittal  
Montgomery/Rocky Hill Superfund Sites

Dear Monica:

The New Jersey Department of Environmental Protection (NJDEP) has reviewed the January 2003 95% Remedial Design Submittal prepared by Camp Dresser & McKee, Inc. (CDM) for the Montgomery Township Housing Development and Rocky Hill Municipal Wellfield Superfund sites. Our comments on the submittal are attached.

Due to the tight project schedule and the oversight being provided by both the U.S. Environmental Protection Agency (USEPA) and the U.S. Army Corps of Engineers (USACOE), we did not perform a detailed review of the entire design submittal. Our review was focused primarily on the overall ground water extraction and monitoring scheme and compliance with NJDEP requirements. We did not review the ground water model, design calculations, or the contract specifications in detail.

You may contact me at 609-633-0766 with any questions or comments.

Sincerely,

Larry Quinn, P.E., CHMM, Site Manager  
Bureau of Case Management

Enclosure

**Bc: K. Petrone, BSM  
D. Doyle, BEERA  
G. Bakeman, BGWPA**

## **NJDEP Comments on 95% Remedial Design Submittal Montgomery/Rocky Hill Superfund Sites**

### **General Comments**

1. **Classification Exception Area (CEA).** The design report does not discuss the establishment of a ground water CEA at the site. New Jersey's Ground Water Quality Standards (N.J.A.C. 7:9-6) and Technical Requirements for Site Remediation (N.J.A.C. 7:26E) require that a ground water CEA be established as part of a remedial action when contaminant levels in ground water exceed the applicable ground water quality standards (GWQS), which is the case at Montgomery/Rocky Hill (this subject was addressed in a September 9, 1998 NJDEP letter to USEPA).

Establishing a CEA generally involves delineating the area in which the GWQS have been exceeded, estimating the length of time needed to achieve compliance, and then documenting the CEA. A CEA designation would remain in effect until it is documented that contaminant concentrations have decreased to the applicable GWQS. The specific requirements for establishing a CEA are now found in Section 8.3 of the Technical Requirements.

2. **Cleanup System Performance.** Section 2 of the report should present CDM's assessment (best estimates) of the effectiveness and duration of the remedial action. Such information will be needed to present the project to local officials and the public. Estimates of the following should be included in the discussion: (a) the volume of water to be extracted (per month and year), (b) the time needed to extract one pore volume from the anticipated capture zone, and (c) the rate of contaminant mass removal (initially and over time). Also, Section 2 should include a figure showing the expected capture zone of the system, based on the modeling of GWTF #1 and the calculations done for GWTF #2.

### **Specific Comments**

1. **Extraction Wells.** Construction of wells in the Passaic Formation with long open holes or screened intervals is not a recommended practice. Six of the eight extraction wells as proposed would have open or screened intervals of 60 feet or more, with three of those having open holes of 80 feet or more. CDM should consider reducing the open intervals of these wells. At the very least, the technical reasons for the proposed open intervals should be presented in detail in the design report.
2. **Sections 2.2.3.2 and 2.2.4.3.** Regarding the new monitoring well pairs, it is recommended that the 25, 26, 27, and 28 pairs be moved closer to their respective extraction wells, to provide a better evaluation of the effectiveness of ground water extraction.

**NJDEP Comments on 95% Remedial Design Submittal  
Montgomery/Rocky Hill Superfund Sites (continued)**

3. Section 2.2.4.3. It is recommended that hydrologic testing, geophysical testing, and sampling be conducted in all new boreholes, before wells are constructed. Such testing would ensure that well screens are set at the most appropriate depths, and would also provide "fresh" sampling data to compare to data gathered from "old" wells. The recommended testing includes down-hole geophysical testing, color video logging, heat pulse flowmeter, acoustic televiewer, and discrete sampling using a discrete-interval sampler (such as the Solinst® Model 425).
4. Section 2.2.4.4. Regarding water service connections, a plan or sequence of steps to accomplish this should be listed, as was done in Section 2.2.4.2 regarding well abandonment. At a minimum, the affected property owners and the local water company must be contacted. It is likely that some or all of the property owners will resist a water service connection.
5. GAC Calculations. Appendices B2 and C2 contain calculations of Estimated Weighted Mean Effluent Concentrations of tetrachloroethene, trichloroethene, and cis-1,2-dichloroethene, for GWTF #1 and #2 respectively. However, the calculated concentrations are different than those used by Calgon Corporation in Appendices B3 and C3 to estimate carbon usage. Also, Calgon's data sheets differ on whether a 50% safety factor is included in their calculations. These seeming discrepancies should be checked.
6. Section 7, Permits. A vapor-phase GAC treatment unit is shown on an equalization tank in the schematic drawing on sheet 5. Although it is probable that emissions from such a treatment unit (if actually constructed) would not require an air emissions permit, this should be verified by estimating emissions and comparing to permitting thresholds.
7. Section 9.2, Environmental Sampling & Monitoring. Per USEPA guidance on Monitored Natural Attenuation (MNA) and the NJDEP Technical Requirements, the secondary plume must be monitored and assessed to determine whether natural attenuation is occurring. NJDEP requirements regarding natural remediation are found in Section 6.3(d) of the Technical Requirements.
8. Table 9-1, Environmental Monitoring Schedule.
  - a) In general, quarterly water level measurements should be taken in most monitoring wells during a ground water extraction project like this one, especially during the first year. Semi-annually is not often enough. Water level measurements are a relatively inexpensive way to get an idea of what impact the extraction system is having on area ground water.

**NJDEP Comments on 95% Remedial Design Submittal  
Montgomery/Rocky Hill Superfund Sites (continued)**

- b) Consider weekly water level measurements in MW-9D for one quarter, followed by monthly measurements after that, to check for potential impacts on the RHMW.
- c) To avoid any confusion, please use the term "Semi-Annually" rather than "Biannually".

# CDM Transmittal

**CDM.**

[Click here and type Local Office Street Address]

[Click here and type Local Office City, State ZIP]

[Click here and type Local Office Phone]

[Click here and type Local Office Fax]

**To:** Kamala Morgan

**From:** Ali Rahmani

**Organization/  
Address:** USACE-Kansas City District

**Date:** February 5, 2003

**Re:** Application for Discharge to Surface Water Permit Equivalency

**Job #:** 6142-903-WK7-DESIG

**Via:**

**Mail:**

**Overnight:**

X

**Courier:**

**Enclosed please find:**

**For your information**

**For your review**

**For your signature**

X

**Approved**

**Approved as noted**

**Returned to you for correction**


● **Message:**

Hi Kamala:

Attached please find the NJPDES application for discharge to surface water permit equivalency. Please sign on Page 4 of NJPDES-1 Form under "Signature of Agent" and then send this to Monica Mahar for signature. Monica needs to sign at 3 different places as an applicant. I will prepare the cover letter for EPA that will accompany this application and send it to Monica for signature.

Please call me, if you have any questions.

Thanks,

M. A. Rahmani  
Signed